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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,215	09/11/2003	Stephen E. Walsh	1432.06US03	6555

7590 05/31/2006
Patterson, Thunte, Skaar & Christensen, P.A.
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Minneapolis, MN 55402-2100

EXAMINER

NAFF, DAVID M

ART UNIT	PAPER NUMBER
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1651

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/660,215

Applicant(s)

WALSH ET AL.

Examiner

David M. Naff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/11/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

A response of 3/16/06 to a restriction requirement of 2/22/06 elected claims 1-8 and 10 without traverse, and canceled non-elected claim 9 by amendment.

5 Claims 1-8 and 10 are examined on the merits, which are all claims in the application.

Claim Rejections - 35 USC § 112

10 Claims 1-8 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

15 The claims are unclear as to the structure of the apparatus claimed. The claims fail to set forth a contiguous functional relationship between the different structural components of the apparatus so that it is clear how the structure of each component functions in relation to each other structural component to accomplish the intended function of the apparatus for encapsulation as required in the preamble of the claims.

20 It is unclear how a center cup can include an opening, reservoir and at least one inner wall as required in claim 1. Where are these located with respect to the cup and with respect to each other? How can a chamber surround only a portion of the center cup as encompassed by the claim. In claim 2, how can the at least one inner wall comprise a first inner wall frustoconical surface. Additionally, the

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purpose of requiring a first inner wall is unclear since a second inner wall is not required in the claim.

In claim 4, the structure is uncertain of a cup having a first inner wall with a first set of grooves, and a second inner wall
5 between the frustoconical surface and the reservoir having a second set of grooves defined in the second wall. The figures of the drawings do not appear to describe such a structure.

In claim 10, how can a collection chamber surround only a portion of the center cup as encompassed by the claim?

10 ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

15 (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 6, 7 and 10 are rejected under 35 U.S.C. 102(b) as
20 being anticipated by Dorian et al (5,643,594) (listed on form 1449).

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The claims are drawn to a spinning disk encapsulation apparatus containing a center cup, outer collection chamber, means for rotating the center cup, means for introducing a fluid stream of material comprising biological material and a polymeric coating solution into the center cup, and means for forming the fluid stream into singulated lines as the center cup is rotated.

Dorian et al disclose a spin encapsulation apparatus for encapsulation that is the same as the presently claimed spinning disk encapsulation apparatus. See Figures 1 and 2, and description thereof in the specification. The inner surface of a conical sidewall of a cup can have grooves (col 8, lines 65), and these grooves will be capable of forming fluid in the cup into singulated lines as the cup is rotated as required by the present claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

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under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art
5 under 35 U.S.C. 103(a).

Claims 3, 4, 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorian et al ('594).

It would have been obvious to provide the apparatus disclosed by Dorian et al with a preferred cone angle and evenly spaced grooves as
10 in claim 3, first and second grooves as required by claim 4, and evenly spaced grooves as in claim 5 since these structures would have been a matter of individual preference, and would be expected not to change the function of the apparatus from that disclosed by Dorian et al. The syringe disclosed Dorian et al (col 6, line 49) is inherently
15 capable of providing the flow rate of claim 8.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Naff whose telephone number is 571-272-0920. The examiner can normally be
20 reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David M. Naff
Primary Examiner
Art Unit 1651

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DMN
5/30/06